

WHAT IS CLAIMED IS:

1. A consumable goods online shopping system that comprises communication information equipment that consumes consumable goods, a portal server to which data is sent from said communication information equipment, an electronic settlement server that performs the settlement of the transaction performed in said communication information equipment, a mail order center server for mail-ordering the consumable goods, a recycling plant server installed in a recycling plant of the consumable goods, and a merchandise control center server installed in a merchandise control center of the consumable goods that interconnect via a network, comprising:

15 said communication information equipment
including,

first information processing means that performs processing of various information in the communication information equipment, first screen display means that displays information-processed information on the screen, first input means that inputs information necessary for information processing, first printing means that prints information-processed contents, first communicating means that communicates the information-processed contents via the network, first consumable goods consumption executing means that executes processing which consumes the consumable goods, and

first consumable goods remaining quantity detecting means that detects a remaining quantity of the consumable goods,

said portal server including,

5 second information processing means that performs the processing of various information in the portal server, second display means that displays the information-processed information on the screen, second input means that inputs the information necessary for information processing, second printing means that displays the information-processed information on the screen, a second mail order address database in which a mail address and recovery cartridge information of the communication information equipment connected to the portal server are stored, a second delivery store database in which delivery stores of the consumable goods are stored, a second mail order center registration information database in which the information of a mail order center that is connected to the portal server and in which an order issue of the consumable goods is given, and a second consumable goods price database in which individual merchandise price information is stored for each mail order center,

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said electronic settlement server including,

25 third information processing means that performs an electronic settlement based on authentication information input from the first input means on said

communication processing equipment, third screen
display means that displays the information-processed
information, third input means that inputs the
information necessary for information processing, third
5 printing means prints the information-processed
contents, third communicating means for communicating
the information necessary for performing the electronic
settlement, and a third electronic settlement database
in which the data necessary for performing the
10 electronic settlement is stored,
said mail order center server including,
fourth information processing means that performs
the processing of various information in the mail order
center server, fourth screen display means that
15 displays the information-processed information on the
screen, fourth input means that inputs the information
necessary for information processing, fourth printing
means that prints the information-processed contents,
fourth communicating means that communicates the
20 information-processed contents via the network, a
fourth merchandise database in which the data of the
merchandise necessary for receiving the mail order
including the price and the stock quantity of the
consumable goods controlled in the mail order center, a
25 fourth customer management database in which the
customer information of the customer of which the order
request is given, and a fourth order table database for

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storing the order table to which an order is given,

said recycling plant server including,

5 fifth information processing means that performs
the processing of various information in the recycling
plant server, fifth screen means that displays the
information-processed information on the screen, fifth
input means that inputs the information necessary for
information processing, fifth printing means that
prints the information-processed contents, fifth
10 communicating means that communicates the information-
processed contents via the network, a fifth cartridge
information reader that reads the owner information
stored in the storage area of the cartridge recovered
in the recycling plant, and a fifth owner information
15 management database in which the number of recovery
cartridges and the owner information are linked and
stored; and

said merchandise control center server including,

20 sixth information processing means that performs
the processing of various information in the
merchandise control center server, sixth screen display
means that displays the information-processed
information on the screen, sixth input means that
inputs the information necessary for the information
25 processing, sixth printing means that prints the
information-processed contents, fifth communicating
means that communicates the information-processed

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input means that inputs the information necessary
for information processing;

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a mail address database in which the mail address
and recovery cartridge information of the communication

a delivery store database in which delivery stores
of the consumable goods are stored for each area;

10 a consumable goods price database in which the
individual merchandise price information is stored for
each mail order center.

mail address notification means that receives a mail address acquisition request issued by mail address automatic registering means of the communication information equipment, retrieves said mail address database, allocates and reports an unregistered empty mail address as the mail address of the communication information equipment to which a request is given; and

empty mail address retrieving means for supporting allocation by a portal server administrator.

4. The portal server according to claim 3,
wherein said information processing means comprises:

mail order center information registering means
that registers the information about an order issue
5 destination of the order table in a mail order center
registration database,

consumable goods price data registering means that
receives the price information and stock information of
the consumable goods merchandise that are periodically
10 sent from said consumable goods mail order center
server stored in a second mail order center
registration database; and

price information sorting means that sorts the
price information for each area genre-classified for
15 each consumable goods merchandise in the price order
and associates and stores the price information and a
mail order center name at the update of said consumable
goods price database.

20 5. The portal server according to claim 4,
wherein said information processing means comprises:

order start information acquiring means that
receives order start information sent from the side of
the communication information equipment and acquires
25 the order start information; and

consumption discount calculating means that
calculates a discount which matches a consumption

delivery method specification area creating means
that creates a specification area which can specify a
delivery method including at least any one of mailing,
conveyance, and store-based delivery as the
5 specification of the delivery method;

destination information specification area
creating means that creates a destination information
store specification area necessary for the mailing and
conveyance;

10 and

delivery store specification creating means that
creates a deliver store specification area necessary
for the stored-based delivery,

the specification area obtained by each of said
15 means is created as the delivery information portion,

at creation of said destination information
specification area, at least one of a postal number, an
address, a name, and a telephone number written to the
owner information in the order start information is set
20 a fault value,

at the creation of said delivery store
specification area, by store information default
setting means, a delivery area is specified from the
postal number, address, and telephone number, a second
25 delivery store database is retrieved from specified
regional information, and a store that is doing
business in the delivery area is set so that it can

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preferentially specified as a default,

regarding the second delivery store database, the latest data is always updated and registered by the control of the portal server administrator,

5 said electronic settlement information portion creating means comprises authentication data input area creating means that creates an area to which authentication data is input required for performing the electronic settlement in said electronic settlement
10 server and creates the authentication data input area created by the authentication data input area creating means,

 the order issue portion creating means including,
 order issue specification area creating means that
15 creates the area in which the activation of a mail order issue instruction can be specified, and

 coupon ticket issuing specification area creating means that creates an area in which the activation of a coupon ticket issuing specification area can be
20 specified, and

 the specification area created by said coupon ticket issuing specification area creating means is created as an order issue portion.

25 7. The portal server according to claim 6, wherein said information processing means comprises:

 coupon ticket issuing notification receiving means

that receives the sent coupon ticket issuing notification;

5 coupon packet issuing processing means that receives the coupon ticket issuing and the order table and performs the ticket issuing of the coupon information based on the consumption discount information and the recycling discount information provided in the price information portion of the order table; and

10 coupon information sending means that sends the ticket-issued coupon information to the communication information equipment.

8. The portal server according to claim 7,
15 wherein said information processing means comprises:

back margin registering means at the side of the manufacturer that registers the information about the brokerage and discount fee that match the handing amount decided according to the arrangement with each
20 mail order center by the data input of the portal server administrator;

order issue notification receiving means that receives a received order notification from the communication information equipment;

25 electronic settlement acknowledgment requesting means that receives the received order notification, creates acknowledgment information based on the

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5 order issue request mediation means that receives
acknowledgment result notification information from
said electronic settlement server and performs
mediation to the mail order center server;

received order completion notification sending
means that receives the received order acknowledgment
15 notification and issues an order issue completion
notification to the communication information
equipment,

order issue request registering means that registers the number of orders counted by the number of

mediation items counting means in the second mail order registration information database for each mail order center together with the order table of the order of which the order issue request is received;

5 order issue request order table sending means that sends the order table of which the order request is received to the mail order center; and

 electronic settlement not-acknowledged notification means that sends an electronic settlement
10 not-acknowledged notification to said first communication information equipment when the electronic settlement is not acknowledged, and

 the information processing means of said portal server including,

15 brokerage calculating means at the side of the manufacturer that calculates the brokerage paid to the side of the mail order center side in accordance with the number of orders that is counted by said number of mediation items counting means and registered in the
20 mail order registration information database by said order issue request registering means; and

 order issue discount calculating means that calculates the discount paid to the mail order center in accordance with the number of mediation items.

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9. The portal server according to claim 8, wherein the information processing means of said portal

server comprises:

settlement information calculating means at the side of the manufacturer that calculates monthly settlement information for each mail order center at a monthly settling day or according to the instruction of the server administrator;

settlement information sending means at the side of the manufacturer that send the calculated settlement information to each mail order center;

settlement information backup means at the side of the manufacturer that backs up all of the settlement information total, settlement information, and order table handled within a settling month to the backup area in said second mail order center registration information database;

settlement information clearing means at the side of the manufacturer that clears the number of orders issued within a predetermined period and an issued table order when the settlement information is backed up by said settlement information backup means at the side of the manufacturer; and

settlement information utility means at the side of the manufacturer that prints and deletes the information backed up in the backup area according to the instruction of the portal server administrator, and

said settlement information calculating means at the side of the manufacturer including:

consumption discount price total calculating means
at the side of the manufacture that calculates the
total of the consumption discount price recorded in the
order table as the settlement information for all the
5 order table tables of the mail order center specified
in said mail order center registration information
database;

recycling discount price total calculating means
at the side of the manufacturer that calculates the
10 total of the recycling discount price recorded in the
order table as the settlement information;

said brokerage calculating means that calculates
the brokerage paid from the side of the mail order
center in accordance with the number of orders as the
15 settlement information;

said order issue discount calculating means at the
side of the manufacturer that calculates the discount
fee paid to the mail order center in accordance with
the number of mediation items as the settlement
20 information; and

settlement information total calculating means at
the side of the manufacturer that calculates the value
in which the order issue discount price is subtracted
from the total of the consumption discount price,
25 recycling discount price, and order issue discount as
the settlement information total.

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10. The portal server according to claim 9,
wherein said information processing means comprises:

stored merchandise order issue receiving means
that receives the stored merchandise order issue of
5 which the order issue is given by said stored
merchandise order issue means; and

stored merchandise order issue mediation means
that mediates the order issue of the stocked
merchandise of which the received order is given and
10 sends the order table to the merchandise control center
server of the consumable goods.

11. The electronic settlement server that
performs the settlement of the transaction performed in
15 said communication information equipment that is
connected to the communication information equipment
that consumes the consumable goods, the portal server
to which data is sent from said communication
information equipment, the mail order center server for
20 mail-ordering the consumable goods, the recycling plant
server installed in the recycling plant of the
consumable goods, and the merchandise control center
server installed in the merchandise control center of
the consumable goods via the network, comprising:

25 information processing means that performs the
electronic settlement based on the authentication
information input from the input means on said

screen display means that displays the information-processed information; input means that inputs the information necessary for information processing;

communicating means for communicating the
information for performing the electronic settlement;
and

12. The mail order center server for mail-ordering the consumable goods that is connected to the communication information equipment, the portal server to which data is sent from said communication information equipment, the electronic settlement server that performs the settlement of the transaction performed in said communication information equipment, the recycling plant server installed in the recycling plant of the consumable goods, and the merchandise control center server installed in the merchandise control center of the consumable goods through the network, comprising:

information processing means that performs the

processing of various information in the mail order center server;

screen display means that displays the information-processed information on the screen;

5 the input means that inputs the information necessary for information processing;

the printing means that prints the information-processed contents;

10 the communicating means that communicates the information-processed contents;

the merchandise database in which the data of the merchandise necessary for receiving the mail order including the price and the stock quantity of the consumable controlled in the mail order center;

15 the customer management database in which the customer information of the customer in which the order request is given; and

the fourth order table database for storing the order table to which the order is given.

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13. The recycling plant server installed in the recycling plant of the consumable goods that is connected to the communication information equipment that consumes the consumable goods, the portal server
25 to which data is sent from said communication information equipment, the electronic settlement server that performs the settlement of the transaction

performed in said communication information equipment,
the mail order center server for mail-ordering the
consumable goods, and the merchandise control center
server installed in the merchandise control center of
5 the consumable goods, comprising:

the information processing means that performs the
processing of various information in the recycling
plant server;

10 the screen display means that displays the
information-processed information;

the input means that inputs the information
necessary for information processing;

the communicating means that communicates the
information-processed contents via the network;

15 the cartridge information reader that reads the
owner information stored in the storage area of the
cartridge recovered to the recycling plant; and

the owner information management database in which
the number of cartridges and the owner information are
20 linked and stored.

14. The recycling plant server according to claim
13, wherein said communication information equipment
comprises:

25 cartridge owner information reading means that
reads the owner information stored in the storage
memory of the recovered cartridge;

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owner information management database registering means that acquires the mail address information from the read owner information and registers it in said owner information management database;

5 recycling discount information sending means that periodically sends the mail address information and the recovery cartridge information registered in the owner information management database to the portal server of the equipment manufacturer as the recycling discount
10 information;

owner information management database clearing means that clears the sent mail address information and the recovery cartridge information in said owner information management database from the owner
15 information management database after the sending processing is performed by said recycling discount information sending means; and

owner information management database utility means that displays, prints, and deletes the contents
20 in the owner information management database according to the instruction of the server administrator;

said owner information management database utility means including,

recovery cartridge information initialization
25 means that sets the recover cartridge information to 1 and registers it in said fifth owner information management database together with the mail address

comprising:

registering means that registers a price list the second consumable goods trader offers in an acceptance storage portion via said predetermined line;

5 distributing means that distributes the price information registered by said registering means to a communicable terminal unit via said predetermined communication line; and

10 calculating means that calculates the discount price that matches the price information distributed by said distributing means and the point calculated by said calculating means.

15 17. The server according to claim 16, wherein said control means comprises control means said customer and said consumable goods trader are associated and stored, controls the applicable condition of said service for each of said customer as the utility condition of the service for each of said consumable goods trader, and said deciding means
20 decides said compensation in accordance with the utilization condition of the service for each said consumable goods trader by said control means.

25 18. The server according to claim 15, wherein said status of use is the recovery condition of said consumable goods or the amount of said consumable goods

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used.

the first information processing step that performs the processing of various information in the communication information equipment, the first screen display step that displays information-processed information on the screen, the first key input/pointing step that inputs the information necessary for information processing with a key/by a pointing device on the screen, the first printing step that prints information-processed information, the first communication step that communicates the information-processed contents via the network, the first

consumable goods consumption execution step that
executes the processing which consumes the consumable
goods, the first consumable goods remaining quantity
detection step that detects the remaining quantity of
5 the consumable goods, in said communication information
equipment;

the second information processing step that
performs the processing of various information in the
portal server, the second screen display step that
10 displays information-processed information on the
screen, the second key input/pointing process that
inputs the information necessary for information
processing with the key or by the pointing device on
the screen, the second printing step that prints
15 information-processed contents, the second
communication step that communicates information-
processed contents via the network, the twenty-first
storage step that stores the mail address and recovery
cartridge information of the communication information
20 equipment connected to the portal server in the second
mail address database, the twenty-second storage step
that stores the delivery store of the consumable goods
in the second delivery store database for each area,
the twenty-third storage step that stores the
25 information of the mail order center that is connected
to the portal server and in which the order issue of
the consumable goods is given in the second mail order

step that prints information-processed contents, the
fourth communication step that communicates the
information-processed contents via the network, the
41st storage step that stores the merchandise data
5 necessary for the mail order including the price and
the stock quantity controlled in the mail order center
in the fourth merchandise database, the 42nd storage
step that stores the customer information of the
customer of which order is requested in the fourth
10 customer management database, the 43rd storage step the
order table of which the order is given in the fourth
order table database, the fifth information processing
step that performs the processing of various
information in the recycling plant server, in said mail
15 order center server;

the fifth screen display step that displays
information-processed information on the screen, the
fifth key input/pointing step that inputs the
information necessary for information processing with
20 the key or by the point device on the screen, the fifth
printing step that prints information-processed
contents, the fifth communication step that
communicates the information-processed information
contents via the network, the fifth cartridge owner
25 reading step that reads the owner information stored in
the storage area of the cartridge recovered in a
recycling plant, the fifth cartridge information

the sixth information processing step that
5 performs the processing of various information in the
merchandise control center server, the sixth screen
display step that displays information-processed
information on the screen, the sixth key input/pointing
'step that inputs the information necessary for
10 information processing, the sixth printing step that
prints information-processed contents, the sixth
communication step that communicates the information-
processed contents via the network, and the sixth
merchandise inventory step that records the merchandise
15 inventory control information of the consumable goods,
in said merchandise control center.

calculation step that receives the status of use of the consumable goods used in the printing device via the predetermined communication line; and

25 compensation decision step that decides the compensation based on said discount price, paid to said second consumable goods trader in accordance with the

fact that said customer purchases the merchandise the second consumable goods trader offers at the discount price based on said point via the predetermined communication line.

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21. A program for realizing the consumable goods online shopping system that comprises communication information equipment that consumes consumable goods, the portal server to which data is sent from said communication information equipment, the electronic settlement server that performs the settlement of the transaction performed in said communication information equipment, the mail order center server for mail-ordering the consumable goods, the recycling plant server installed in the recycling plant of the consumable goods, and the merchandise control center server installed in the merchandise control center of the consumable goods that interconnect via the network, wherein the program the computer execute:

the first information processing step that performs the processing of various information in the communication information equipment, the first screen display step that displays information-processed information on the screen, the first key input/pointing step that inputs the information necessary for information processing with the key/by the pointing device on the screen, the first printing step that

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calculating means that receives the status of use
of the consumable goods used in the printing device via

compensation deciding means that decides
5 compensation that is based on the reduced price, paid
to said second consumable goods trader in accordance
with the fact that said customer purchases the
merchandise the second consumable goods trader offers
at said reduced price that is based on said point via
10 the predetermined purchase screen.

23. A recording medium of which the contents can be read, in which a program code for realizing the consumable goods online shopping system is stored, and that comprises communication information equipment that consumes consumable goods, the portal server to which data is sent from said communication information equipment, the electronic settlement server that performs the settlement of the transaction performed in said communication information equipment, the mail order center server for mail-ordering the consumable goods, the recycling plant server installed in the recycling plant of the consumable goods, and the merchandise control center server installed in the merchandise control center of the consumable goods that interconnect via the network, comprising:

the first information processing step that

performs the processing of various information in the communication information equipment, the first screen display step that displays information-processed information on the screen, the first key input/pointing step that inputs the information necessary for information processing with the key/by the pointing device on the screen, the first printing step that prints information-processed information, the first communication step that communicates the information-processed contents via the network, the first consumable goods consumption execution step that executes the processing which consumes the consumable goods, the first consumable goods remaining quantity detection step that detects the remaining quantity of the consumable goods, in said communication information equipment;

the second information processing step that performs the processing of various information in the portal server, the second screen display step that displays information-processed information on the screen, the second key input/pointing process that inputs the information necessary for information processing with the key or by the pointing device on the screen, the second printing step that prints information-processed contents, the second communication step that communicates information-processed contents via the network, the 21st storage

step that stores the mail address and recovery
cartridge information of the communication information
equipment connected to the portal server in the second
mail address database, the 22nd storage step that
5 stores the delivery store of the consumable goods in
the second delivery store database for each area, the
23rd storage step that stores the information of the
mail order center that is connected to the portal
server and in which the order issue of the consumable
10 goods is given in the second mail order center
registration information database, the twenty-fourth
storage step that stores individual merchandise price
information in the second consumable goods price
database for each mail order center, in said portal
15 server;
the third information processing step that
performs the electronic settlement based on the
authentication information input according to the first
processing input on said communication information
20 equipment, the third screen display step that displays
information-processed information on the screen, the
third key input/pointing step that inputs the
information necessary for information processing with
the key or by the pointing device on the screen, the
25 third printing step that prints information-processed
contents, the third communication step for
communicating the information necessary for performing

the electronic settlement, the third storage step that stores the data necessary for performing the electronic settlement, in said electronic settlement server;

the fourth information processing step that

5 performs the processing of various information in the mail order center server, the fourth screen display step that displays information-processed on the screen, the fourth key input/pointing step that inputs the information necessary for information processing with

10 the key or by the pointing device, the fourth printing step that prints information-processed contents, the fourth communication step that communicates the information-processed contents via the network, the 41st storage step that stores the merchandise data

15 necessary for the mail order including the price and the stock quantity controlled in the mail order center in the fourth merchandise database, the 42nd storage step that stores the customer information of the customer of which order is requested in the fourth

20 customer management database, the 43rd storage step the order table of which the order is given in the fourth order table database, the fifth information processing step that performs the processing of various information in the recycling plant server, in said mail

25 order center server;

the fifth screen display step that displays information-processed information on the screen, the

fifth key input/pointing step that inputs the
information necessary for information processing with
the key or by the point device on the screen, the fifth
printing step that prints information-processed
5 contents, the fifth communication step that
communicates the information-processed information
contents via the network, the fifth cartridge owner
reading step that reads the owner information stored in
the storage area of the cartridge recovered in a
10 recycling plant, the fifth cartridge information
reading step that links and stores the number of
recovery cartridges and the owner information, in said
recycling plant server; and
the sixth information processing step that
15 performs the processing of various information in the
merchandise control center server, the sixth screen
display step that displays information-processed
information on the screen, the sixth key input/pointing
step that inputs the information necessary for
20 information processing, the sixth printing step that
prints information-processed contents, the sixth
communication step that communicates the information-
processed contents via the network, and the sixth
merchandise inventory step that records the merchandise
25 inventory control information of the consumable goods,
in said merchandise control center.

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24. The recording medium of which the contents
can be read by the computer, in which the program code
for storing the program code read by the server that
controls the status of use of said consumable goods the
5 first consumable goods that handles the consumable
goods offers, wherein the recording medium stores the
program and executes:

calculating means that receives the status of use
of the consumable goods used in the printing device via
10 the predetermined communication line and calculates the
point against the customer in accordance with the
received status of use; and

compensation deciding means that decides
compensation that is based on the reduced price, paid
15 to said second consumable goods trader in accordance
with the fact that said customer purchases the
merchandise the second consumable goods trader offers
at said reduced price that is based on said point via
the predetermined purchase screen.

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